

VotFELCV, A.L.

## PLATE I BOOK EXTRATION

207/421

Konferencja po voprosam teorii i prikladnykh sistemakh avtomaticheskikh sistem.  
Moskva, 1958

Teoriya i prikladnye difraktsionnykh avtomaticheskikh sistem; trudy konferencii  
(Theory and Application of Discrete Automatic Systems) Translated from the  
(Conference) Moscow, AM SSSR, 1958. 572 p. 5,000 copies printed.

Distributing Agency: Akademika nauk SSSR, Nauk. i tekhn. sekretariiat SSR po voprosam  
tekhniki upravleniya, Institut avtomatiki i telemekhaniki.

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Sciences, Ed. of Publishing House: Nauk. i tekhn. sekretariiat, Tech. Ed., S.G. Kostrovich.

PREFACE. These transactions are intended for the members of the conference and  
other specialists in automatic control.

CONTENTS. In Conference on the Problems of Theory and Application of Discrete  
Automatic Systems took place in Moscow from September 22 to 26, 1958. It was  
the first conference devoted to discussion of the present state of the theory  
and techniques of discrete automatic systems and to planning future directions of development  
and applications. The papers discussed at the conference have been divided into four groups:

In the first group optimization problems of designing linear digital control  
systems and radio communication systems, in particular plant key control systems, in  
which are realized optimal processes as to pulse response. In second group of papers is  
devoted to the analysis and synthesis of pulse systems with variable parameters  
of pulse systems with several pulse components in the study of relay communication  
pulse systems. Problems of simulating pulse systems and their applications  
and techniques of discrete automatic systems have been included in this group.  
In the third group problems of using elements of digital, binary and decimal  
digital systems. Problems of using elements of programming logic, power elec-  
tronics, random ratio communication, multiplier etc. are discussed. Problems  
of analog-digital conversion and waveforms as well as problems of developing  
specialized functional converters have been included in this group. The fourth  
group of papers describes theoretical elements and certain practical applications  
of the different types of self-adjusting systems, optimizing control systems,  
which are developed on relays, pulse and digital devices. Here are also found  
papers describing various methods of investigating steady-state conditions in  
optimizing systems, results of application of methods of dynamic programming to  
problems of automatic regulation and analysis of existing optimizing control  
systems. Some of the more interesting publications and discussions have been  
left the discussion of the various conference papers have also been included in  
the Transactions. References and references accompany most of the papers.

Termin, J.B. (Person). Discrete Control Machine For a Blooming Mill. 251  
This article describes a programed control machine being developed for the  
automatic control of rolling mill processes. There are no references.

Kazan, S.M., V.N. Bobachev, A.I. Tsvetkov and D.P. Bratman (Person). A Complex  
Digital-Continuous Interpolator for Programming of Processes in Control  
Systems With Digital Control Machines. 263  
The article describes some units of a high-speed discrete controlling compu-  
ter. There is 1 Soviet reference.

Slyer, B.M. (Person). Comparative Investigation and Development of Components  
of Position, Current and Speed Systems in Digital Programmed Control. 269  
The author presents a comparative study of control systems using digital  
programmed control, such as position systems with pulse-numerical code  
signals and with binary code and integral systems with discrete and with  
continuous signals and with a fractional integrator. There are 5 references:  
4 Soviet (including 1 translation), and 1 English.

Zernovkin, A.R. (Person). Classification of Converters of a Continuous Quantit-  
ity Into a Numerical Equivalent. 314  
This is a classification of analog-to-digital converters. There are 14  
references: 1 Soviet and 13 English.

L 59520-65 EWT(d)/T/FWP(1)/BED-2 Pg-4/Pg-4/Pk-4 IJP(c) BB/OD  
ACCESSION NR: AP5015535 UR/0286/65/000/008/0069/0070  
681.142.32 53

AUTHOR: Kagan, B. M.; Dolkart, V. M.; Novik, G. Kh.; Kanevskiy, M. M.; Luk'yanova,  
L. M.; Stepanov, V. N.; Ul'yanova, N. K.; Koltypin, I. S.; Adas'ko, V. I.; Molchanov,  
V. V.; Voitelev, A. I.

TITLE: General-purpose digital control computer. 161/ Class 42, No. 170218

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1963, 69-70

TOPIC TAGS: Computer, control computer, arithmetic unit, adder, core memory, D...  
register, strobing, amplifier, analog digital converter, digital analog converter

ABSTRACT: An Author Certificate has been issued for a digital control computer consisting of an arithmetic unit, magnetic core memory unit, control unit, input/output unit, magnetic tape memory, teletype, perforator, universal converter, and operator console. The system is economical, fast-acting, and reliable, due to a number of distinct features incorporated into its design. Economy is achieved by a special arrangement of the adder and the memory unit with its output parity check control. Speed is increased by an asynchronous mode of operation, and a special design of the adder, in which the time necessary for information distribution is kept to a mini-

Card 1/2

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ACCESSION NR: AP5015535

mum. High overall reliability is achieved by a temperature-stabilized, high-speed, disturbance-immune memory unit design. Other reliability features include the absence of interference between the B-register contents and its counter, a longitudinal parity check for the punch tape, an automatic tape misalignment guard, and automatic drift compensation in the multichannel A/D and D/A converters. [BD]

ASSOCIATION: Vsesoyuznyy Ordena trudovogo krasnogo znameni nauchno-issledovatel'skiy institut electromekhaniki (All-Union Scientific Research Institute of Electromechanics)

SUBMITTED: 06Mar64

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OTHER: 000

ATD PRESS: 4053

Card 272

16,8000 (1121,1132,1329)

27979  
S/194/61/000/004/011/052  
D249/D302

AUTHORS: Kagan, B.M., Dolkart, V.M., Voitelev, A.I. and  
Brudnyy, B.P.

TITLE: A complex digital computer installation for investigating processes occurring in control systems with digital control machines

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 4, 1961, 21, abstract 4 B160 (V sb. Teoriya i  
primeneniye diskretn. avtomat. sistem, M., AN SSSR,  
1960, 288-295) *H*

TEXT: A description is given of a complex computer installation comprising the general purpose computer type M-3, general purpose electronic computer type MN-8(MN-8), and a two-way data converter for the analog and digital forms of information. The installation is intended for simulating complex automatic systems, consisting of a controlled object (analog part) and a controlling digital part.

Card 1/4

27979  
S/194/61/000/004/011/052  
D249/D302

A complex digital computer...

chine. In an exploratory system comprising a closed circuit, the object and the digital machine are tied together by means of the digital-analog and analog-digital converters. In this system the task of the digital machine is to process the object's output measured at some instant of time, and to prepare the instructions which are then sent to the object via converters. It is assumed that after having received the data from the object, the digital machine continues to process the data for a certain defined time interval after which, it suddenly changes its output control instructions. Then begins the "control cycle", at the end of which a new reading is taken from the object and a new computing cycle is initiated by the digital machine. In the present complex installation the object is simulated by the installation MN-8 and the function of the calculating machine is performed by the installation M-3. It may be noted that in general there exist three different operating conditions for the kind of installation considered. If the digital computer has the same speed of functioning as the analog computer, the operation is carried out in the real time scale. If the speed

44

Card 2/4

27979  
S/194/61/000/004/011/052  
D249/D302

A complex digital computer...

of the digital computer is low, the time scale of the MN-8 can be adjusted. Finally, if the required adjustment of the time scale is technically impossible, the analog computer can be made to operate with the intermission of solution. For the present installation the second type of operation has been selected. This type of operation has been selected. This type of operation permits in particular the use of only one analog-digital and one digital-analog converter, since individual translations can be performed and stored in a sequential manner. Converter connection to an arbitrary channel of a variable is effected by means of a special switch based on the step selector, type UW (ShI)25/8. The analog-digital converter (voltage binary code) utilizes the principle of the "balancing currents" in a circuit with feedback, and has seven binary divisions. For the reverse translation, the current addition circuit in the decision unit is used. In order to enable the use of the computer M-3 in the present installation, two operations had to be added to it, viz., "direct translation" and "reverse translation". In the address part for this instruction, the address of the subsequent

44

Card 3/4

A complex digital computer...

27979  
S/194/61/000/004/011/052  
D249/D302

44

instruction is given together with the address of the cell to which the converted number should be sent, or from which a number to be converted should be taken. By using this instruction the control is effected of not only the converter, but also of channel switching and the corresponding switching in the computer itself. The combined analog-digital computing installation can be put to the dual purpose of solving mathematical problems and producing synthesis of the optimum conditions for adjustment and control systems.  
1 reference. [ Abstracter's note: Complete translation ]

Card 4/4

S/183/60/000/004/001/005  
B004/B058

AUTHORS: Voitelev, Yu. A., Katorzhnov, N. D.

TITLE: Improvement of the Resistance of Polyamide Fibers to the  
Effect of Light

PERIODICAL: Khimicheskiye volokna, 1960, No. 4, pp. 3 - 7

TEXT: The authors give a survey of the existing methods of stabilizing polyamide fibers against the effect of sunlight, mainly proposed in Western publications and patents. They mention: 1) photostabilization by means of chromium salts (synthetic tanning agents, chrome dyes, potassium bichromate, chromium anthranilate, chromium fluoride). Data concerning the effect of chromium salts on the photostability of caprone fibers are compiled in Table 1. An addition of from 0.01 to 0.05% chromium salt is recommended. 2) Photostabilization by means of manganese salts (manganese salicylate, Table 2). 3) Other photostabilizers, such as aluminum salicylate, cerium oxide, organic and inorganic copper compounds (chlorides, iodides, phosphates); combinations of chromium- and manganese salts, copper- and manganese salts; surface treatment of the manganese salts, copper- and manganese salts; surface treatment of the

Card 1/2

Improvement of the Resistance of Polyamide  
Fibers to the Effect of Light S/183/60/000/004/001/005  
B004/B058

finished fiber with such salts and the prevention of their being washed out by means of precipitation (zinc acetate + disodium phosphate). The authors emphasize the necessity of a comprehensive study of these methods. The introduction of the stabilizer into the monomeric material before polymerization or into the polymeric melt before spinning is described by them as being specially promising. There are 2 tables and 27 references: 5 Soviet, 6 US, 7 British, 6 German, 2 French, 1 Japanese, and 1 Swiss.

ASSOCIATION: VNIIV (All-Union Scientific Research Institute of Synthetic Fibers)

Card 2/2

KAGAN, B.M., doktor tekhn. nauk; DOLKART, V.M., kand. tekhn. nauk; NOVIK, G.Kh.,  
kand. tekhn. nauk; STEPANOV, V.N., inzh.; KANEVSKIY, N.N., inzh.;  
LUK'YANOV, L.M., inzh.; TANAYEV, M.Ya., inzh.; POLYAKOV, V.N., inzh.;  
KOLTYPIN, I.S., inzh.; UL'YANOVA, Ye.K., inzh.; ADAS'KO, V.I., inzh.;  
MOLCHANOV, V.V., inzh.; VOITELEV, A.I., inzh.

The "VNIIEM-1" universal control computer. Elektrotehnika 35 no.7:  
(MIRA 17:11)  
4-10 '64.

KATORZHNOV, Nikolay Dmitriyevich; VOITELEV, Yuriy Aronovich;  
VERBITSKAYA, Ye.M., red.; PYATNITSKIY, V.N., tekhn.red.

[Identification of synthetic fibers; qualitative and quantitative analysis of synthetic fibers in the textile industry] Raspoznavanie khimicheskikh volokon; kachestvennyi i kolichestvennyi analiz khimicheskikh volokon v tekstil'noi promyshlennosti. Moskva, GIZLEGPROM, 1963.  
107 p.

(Textile fibers, Synthetic--Analysis)

VOITELEV, Yu.A.; KATORZHENOV, N.D.

Increasing the heat stability of polyamides by the inclusion  
of small amounts of inorganic substances. *Khim.volok.*  
no.3:3-6 '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.  
(Polyamides—Thermal properties)

KUDRYAVTSEV, G.I.; KATORZHNOV, N.D.; VOITLEV, Yu.A.; GOLUBEVA, Ye.V.;  
NENAROKOMOV, L.S.

Effect of inorganic salts on the thermostability of capron fiber.  
Khim.volok. no.5:16-20 '60. (MIRA 13:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.  
(Nylon)

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S/183/60/000/03/02/007  
B020/B054

AUTHORS: Voitelev, Yu. A., Katorzhnov, N. D.

TITLE: Increase in the Thermal Stability of Polyamides by Adding Small Quantities of Inorganic Substances

PERIODICAL: Khimicheskiye volokna, 1960, No. 3, pp. 3-6

TEXT: In the present paper, the authors describe the effect of inorganic heat stabilizers on the thermal stability of polyamides, and mention the previously observed effect of elementary copper (in finely ground or colloidal state), inorganic compounds of mono- and bivalent copper, and organic copper compounds. They studied various procedures of adding thermostabilizers and the increase in thermal stability of polyamides with the following additions: 1) Mixture consisting of 100 parts of  $\epsilon$ -caprolactam, 4 parts of a salt of hexamethylene diamine and adipic acid, and copper or a copper compound; 2) 100 parts of polyamide consisting of 60 parts of  $\epsilon$ -caprolactam and 40 parts of a hexamethylene diamine - adipic acid salt dissolved in a mixture consisting of 285 parts by volume of alcohol and 71 parts by volume of water. After heating to

Card 1/3

Increase in the Thermal Stability of Polyamides S/183/60/000/03/02/007  
by Adding Small Quantities of Inorganic Sub- B020/B054  
stances 82061

70-80°, copper or a copper compound is added. The influence of additions of copper or copper compounds on the thermal stability of a polyamide film is given in Tables 1 and 2. Table 3 shows the thermal stability of polyamides stabilized with phosphorous and halide compounds. Table 4 shows the increase in thermal stability of polyamides by the addition of ternary stabilizer systems, and Table 5, by the addition of 2-mercapto benzimidazole, halide and phosphorous compounds. The authors deal with the compounds and systems most used in the individual groups, the quantities added, their effect, the influence of the polyamide type, the influence of other additions (plasticizers, fillers, resins, pigments, antioxidants, etc.). Hitherto, it has not been possible to clarify the action mechanism of heat stabilizers and their consumption in the aging process of polyamides. Finally, the authors mention the use of chromium- and manganese salts as photochemical stabilizers. There are 5 tables and 11 non-Soviet references.

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Card 2/3

Increase in the Thermal Stability of Polyamides S/183/60/000/03/02/007  
by Adding Small Quantities of Inorganic Sub- B020/B054  
stances 82061

ASSOCIATION: VNIIIV (Vsesoyuznyy nauchno-issledovatel'skiy institut  
volokna - All-Union Scientific Research Institute of  
Fibers)

X

Card 3/3

VOITELEV, Yu.A., mladshiy nauchnyy sotrudnik; KATORZHOV, N.D.

Determining the amount of heterochain fibers in blends. Tekst.  
prom. 22 no.11:72-77 N '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennykh  
volokon (VNIIV) (for Voitelev). 2. Nachal'nik laboratorii  
Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennykh  
volokon (for Katorzhnov).  
(Textile fibers, Synthetic) (Chemistry, Analytic--Quantitative)

KATORZHNOV, N.D.; VOITELEV, Yu.A., mladshiy nauchnyy sotrudnik;  
BIBER, B.L., mladshiy nauchnyy sotrudnik

Rapid method for determining polyamide fibers. Tekst.prom.  
22 no.8:72-77 Ag '62. (MIRA 15:8)

1. Nachal'nik laboratorii Vsesoyuznogo nauchno-issledovatel'skogo  
instituta iskusstvennykh volokon (VNIIV) (for Katorzhnov).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennykh  
volokon (for Voitelev, Biber).  
(Textile fibers, Synthetic) (Polyamides)

KATORZHNOV, N.D.; VOLTELEV, Yu.A.; PROSYANIK, Yu.V.

Regulators of the molecular weight of polycaprolactam and action  
mechanism. Khim. volok. no.6:23-26 '64. (MIRA 18:1).

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.

8/081/63/000/001/061/061  
B144/B186

AUTHORS: Katorzhnov, N. D., Voitelev, Yu. A., Biber, B. L.

TITLE: Rapid method for differentiating polyamide fibers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 566, abstract  
1T295 (Tekstil'n. prom-st', no. 8, 1962, 72-77)

TEXT: Improved schemes and rapid methods are suggested for determining all known polyamide fibers (including Enant and Pelargon), based on analyzing their solubility in different solvents. Methods are recommended for the qualitative and quantitative determination of Caprone and Anid fibers mixed with cotton, wool and viscose staple fibers.  
[Abstracter's note: Complete translation.] ✓

Card 1/1

VOITELEV, Yu.A.; KATORZHNOV, N.D.

Increasing the stability of polyamide fibers toward sunlight and  
weather. Khim.volok no.4;3-7 '60. (MIRA 13:10)

1. Vsesoyuznyj nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.  
(Textile fibers, Synthetic) (Polyamides)  
(Photochemistry)

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1209 only

AUTHORS:

Kudryavtsev, G. I., Katorzhnov, N. D., Voitelev, Yu. A.  
Golubeva, Ye. V., Nenarokomov, L. S.

TITLE:

Effect of Inorganic Salts on the Heat Resistance of Caprone  
Fibers

PERIODICAL: Khimicheskiye volokna, 1960, No. 5, pp. 16-20

TEXT: The present paper describes investigations carried out to increase the heat resistance of caprone fibers by additions of inorganic salts. The authors used water-soluble copper salts of nitric, citric, lactic, sulfuric, perchloric, acetic, and formic acids. 0.05 - 0.01% additions of these compounds were introduced during the polymerization of caprolactam. The authors further used 0.05-0.01% additions of water-insoluble, fatty-acid copper salts introduced into molten caprolactam. 0.25-0.5% additions of copper borate, copper phosphate, and copper chromate, as well as three-component additions, namely, copper acetate, potassium iodide, and monosubstituted sodium phosphate, were also used. It was shown that the specific viscosity reaches a maximum when adding copper stabilizers and heating the fiber to

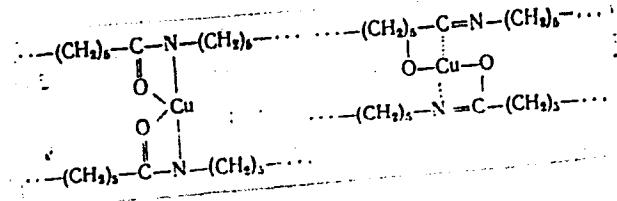
Card 1/4

87876

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B028/B054

Effect of Inorganic Salts on the Heat  
Resistance of Caprone Fibers

180°C. Fibers with additions of water-soluble copper salts and three-component additions were tested for heat resistance. They were heated for 6, 24, 48, 72, and 100 hours to 150°C, and for 2, 8, 14, 24, and 36 hours to 180°C. It was shown that a simultaneous introduction of multi-component additions during fiber polymerization yielded maximum heat resistance. 0.03% copper acetate, 0.25% sodium phosphate, and 2% potassium iodide were used. This inhibited the decomposition of the fiber during heating. Resistance to tearing increased by 8% on 14 hours' heating to 180°C. After 90 hours' heating to 180°C, it had only dropped by 39.2% (as against 67% after two hours without addition). Copper salts form a chelate compound with the fiber, in which the copper is bound by secondary valencies:



Card 2/4

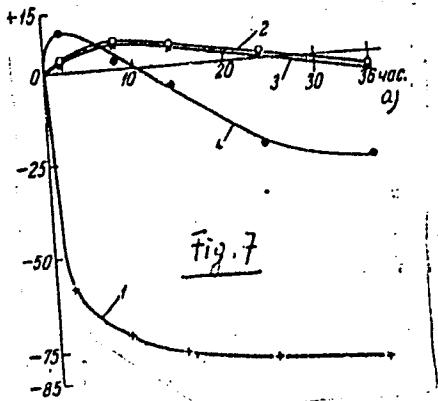
87876

S/183/60/000/005/003/007  
B028/B054

Effect of Inorganic Salts on the Heat  
Resistance of Caprone Fibers

Chelatization occurs in the lactim rather than in the lactam form.  
There are 11 figures and 13 references: 3 Soviet, 8 German, 1 US,  
2 French, and 1 British.

ASSOCIATION: VNIIIV {All-Union Scientific Research Institute of Synthetic  
Fibers}



Card 3/4

87876

S/183/60/000/005/003/007  
B028/R054

Legend to Fig. 7: Change in resistance to tearing of caprone fiber after addition of three-component salts on heating to 180°C in air.  
Curve 1: fiber without addition; 2: with addition of 0.03% Cu acetate, 2% KI, and 0.25% NaH<sub>2</sub>PO<sub>4</sub>; 3: with addition of 0.015% Cu acetate, 1% KI, and 0.25% NaH<sub>2</sub>PO<sub>4</sub>; 4: with addition of 0.05% Cu acetate; a) hours

Card 4/4

VOITELEV, Yu. A., mladshiy nauchnyy sotrudnik; KATORZHNOK, N. D.

Quantitative analysis of synthetic heterochain fibers. Tekst.  
prom. 23 no. 3:72-80 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennykh volokon (VNIIV) (for Voitelev). 2. Nachal'nik laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennykh volokon (for Katorzhnov).

(Synthetic fibers)  
(Chemistry, Analytical--Quantitative)

VOITH, L.

Role of sputum cultures and laryngeal swabs in  
diagnosis of tuberculosis. Tuberk. kardesei 5 No.3:  
40-43. Sept 1953. (CIML 25:5)

1. Doctor. 2. Dunavecsei District Tuberculosis Welfare  
Center (Head Head-Physician -- Dr. Laszlo Voith).

VOITH,Laszlo,dr.

Results of ambulatory and sanatorial therapy of tuberculosis.  
Tuberkulosis 13 no.5:141-144 My '60.

1. A Dunavecsei Jarasi Tamacs Tbc Gondozointezete es Tudobete-  
gotthona, Solt (vezeto foorvos: Voith,Laszlo,dr.) kozlemenye.  
(TUBERCULOSIS ther.)

VOITH, Laszlo

Care and fate of Koch-positive persons. Tuberkulosis 10 no.7-9:  
179-184 July-Sept 57.

1. A Dunavecsei Jaras tbc. Gondozó Intezetenek (Solt) kozlemenye.  
(TUBERCULOSIS, PULMONARY, statist.  
active tuberc. in Hungary (Hun))

VOITH, Laszlo, dr.

Morbidity during the period following a mass survey.. Tuberkulosis  
13 no.1:15-18 Ja '60.

1. A Dunavecsei Jarasi Tanacs Tbc Gondozointezetenek (Solt) (Vezeto  
foorvos: Voith, Laszlo, dr.) kozlemenye.  
(TUBERCULOSIS epidemiol.)

VOITH, Laszlo, dr.

Epidemiologic conditions in Dunavecse district. Tuberk. kerdesei  
8 no.2:43-45 Apr 55.

1. A Dunavecsei Jarasi Tanacs tbc. Gondozointezetenek (Solt,  
vezetoorvos: Voith Laszlo dr.) kozlemenye.  
(TUBERCULOSIS, epidemiology,  
in Hungary)

VOITH, Laszlo, dr.

Screening of population in Dunavecse county in 1951-1955.  
Tuberk. kerdesei 9 no.4:148-153 Aug 56.

1. A Dunavecsei Jarasi Tanacs Tbc. Gondozo Intezetenek (Solt),  
kozl. (Vezeto foorvos: Voith, Laszlo, dr.).  
(TUBERCULOSIS, PULMONARY, prev. & control  
in Hungary, screening of population in one county in  
1951-5 (Hun))

VOITH, Laszlo, dr.

Tuberculosis morbidity of BCG-vaccinated persons. Orv. hetil.  
95 no.42:1151-1155 17 Oct 54.

1. A Dunavecsei Jarasi Tanacs tbc. Gondozintezetenek (Solt)  
kozlemeny  
(BCG VACCINATION  
postvacc. morbidity)

Distr: 4E2c

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1

*8 27 27*  
*Effects of silicon and iron impurities upon the properties*  
*of Al-Mg alloy. László Endré, Rezső Herendi, Ottó*  
*Székely, and Márton Voith. Kohászati Lapok 91, 145-9*  
*(1958). Contaminant traces will not affect hardenability*  
*but will cause an increase in hardness.<sup>27</sup> The Si content will*  
*dissolve over 300° and will segregate upon cooling as Mg<sub>2</sub>Si*  
*or Fe<sub>2</sub>Si<sub>3</sub>. Annealability is improved with Fe and Si if*  
*either or both are of low concn. If both are of high concn.,*  
*Fe<sub>2</sub>Al<sub>3</sub>, a very hard phase will form. Recrystn. is affected*  
*by Fe and Si in that these contaminants will retard the*  
*growth of the crystallites. The recrystn. threshold is 10-15%*  
*reduction at 300° and <10% at 500°.* L. G. Arval

CC

V1

PM

JL

Argo

VOYTKEVICH, V.I. [Voitkevych, V.I.]

Some problems concerning the acclimatization of the organism to chronic oxygen starvation. Fiziol. zhur. [Ukr.] 10 no.3:360-366 My-Ja '64.  
(MIRA 18:9)

1. Terapeuticheskiy sektor Instituta fiziologii im. I.P.Pavlova AN SSSR.

Voi. 400, Ye., general-major

Explicit of the soldier in artistic representation.  
Komm. Vooruzh. Sili 4 no. 10-22-29 My '64. (MRA 12:7)

I. Nachal'nik strelka kultury Glavnogo politicheskogo  
upravleniya flotovskoy armii i Vozerno-Morskogo Flota.

VQITOV, Pavel Ivanovich

[Mechanized cultivation of vegetables] Mekhanizatsiya vozdelyvaniya ovoshchnykh kul'tur. Izd.2., perer. i dop. Moskva, Gos. izdat. sel'khoz. lit-ry, 1960. 231 p.  
(MIRA 14:8)  
(Vegetable gardening) (Agricultural machinery)

*SE*  
VOITESHCHINSKAYA T. V. (Senior Laboratory Worker, Rovno NIVS) and  
POGOREL'YI A. I. (Candidate of Veterinary Sciences) and NELVICHUK  
and MEREZH'SKY A. I. (Junior Scientific Co-workers)

"Param histomiasis of burned cattle."

Veterinariya, Vol. 36, No. 12, December 1981, P. 25

VALITSEKHOVSKIY, A. L.

Valitsekhovskiy, A. L. Kadmus of USSR. Goryaz  
Year, 112 [10] 53-61 (1986). Deposits, mining, work  
and use of Kazakh lead are discussed in detail.

Valatashin, M. P., and Tolstor, D. M. Determination  
of plasticity of suspensions of mineral systems. No. 43  
*J. Phys. Chem. (USSR)*, 47(84), 11 (1933); *Kolloid-Z.*  
76, 103-110 (1933). A new design of a rotating-cylinder  
apparatus was applied to the measurement of the plastic  
flow constants of various

61 different grades of clay. At concentrations corresponding  
to equal yield values, the more plastic the clay, the  
smaller was its viscosity. As a measure of plasticity the

Voitsik, L.R.

LATYSHOV, G.D.

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurasulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Ivashov; G. S. Ibranova; A. Ye. Kiv; Ye. N. Lebedev, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Nishanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

Card 1/20

174.

Transactions of the Tashkent (Cont.)

SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Card 2/20

176

- Transactions of the Tashkent (Cont.) SOV/5410  
instruments used, such as automatic regulators, flowmeters,  
level gauges, and high-sensitivity gamma-relays, are described.  
No personalities are mentioned. References follow individual  
articles.

## TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION  
IN ENGINEERING AND GEOLOGY

Lobanov, Ye. N. [Institut yadernoy fiziki UzSSR - Institute of  
Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes  
and Nuclear Radiation in Uzbekistan 7

Taksar, I. M., and V. A. Yanuchkovskiy [Institut fiziki AN Latv  
SSR - Institute of Physics AS Latvian SSR]. Problems of the  
Typification of Automatic-Control Apparatus Based on the Use of  
Radioactive Isotopes 9

Card 3/20

Transactions of the Tashkent (Cont.)	SOV/5410
of Geological Specimens	277
Abdullaev, A. S., S. A. Bibinov, Ye. M. Lobanov, A. P. Novikov, and A. A. Khaydarov [Institute of Nuclear Physics AS USSR]. Express Determination of Lead Percentage in Concentrates	282
Vorozhbitskiy, B. G., D. F. Bespalov, L. N. Bondarenko, L. R. Vol'tsik, N. V. Popov, A. I. Kraustov, Yu. S. Shimelevich, A. S. Vetlin [Institute of Geology and Production of Mineral Fuels AN SSSR]. Results of the First Industrial Tests of a Neutron Generator in Oil Wells	285
Flik'in, I. N., V. N. Smirnov, and L. P. Starchik [Institut geologo del'a AN SSSR - Mining Institute AS USSR]. Use of Alpha-Radiation of Po <sup>210</sup> for the Quantitative Control of En- richment Productions Containing Beryllium, Boron, Fluorine, and Aluminum	293
Srapenyants, R. A., and B. B. Nefedov [Vsesoyuznyy n.-i. insti- tut mekhanizatsii sel'skogo khozyaystva - All Union Scientific Card 14/20	

KONIG, B.; VOJACEK, K.; ZAPLETAL, B.

Eosinophilic granuloma of the orbit. Cesk. oftal. 20 no.3:166-172  
My '64.

1. Ocni klinika lekarske fakulty PU [Palackeho Universita] v Olo-  
mouci (prednosta doc. dr. V. Valach) a Neurochirurgicke oddeleni  
fakultni nemocnice v Olomouci (vedouci MUDr. B.Zapletal).

REITER, Radvan, inz.; VOJACEK, Tomas

Influence of asphalt bitumen on insulating PVC foils. Inz.  
stavby 12 no.10: 448-451: '64.

1. Research Institute of Building Construction, Gottwaldov (for  
Reiter). 2. Stavebni izolace National Enterprise, Prague (for Vojacek).

PROKES, B., dr; VOJACEK, T.; VLASAK, V., inz.

New waterproof materials. Stavivo 40 no.12:418 D '62.

1. Stavební izolace, n.p. Praha.

PROKES, Bohumir, dr.; VOJACEK, Tomas

PVC waterproofing in the German Federal Republic and Czechoslovakia.  
Poz stavby 11 no. 4:225-226 '63.

1. Stavebni izolace Praha.

SPINKA, J.; VOJACEK, V.; KARLICEK, V.

Experimental experiences with vascular sutures using Gudov's  
instrument. Rozhl. chir. 44 no.7:480-485 Jl '65.

1. I. chirurgicka klinika lekarske fakulty Karlovy University  
v Plzni (prednosta doc. dr. J. Spinka).

KARLICEK, V.; VLKOVA, V.; VOJACEK, V.

Coronography under experimental conditions. I. Technic. Plzen.  
lek. sborn. 24:33-36 '64

1. Chirurgicka klinika lekarske fakulty Universit- Karlovy v  
Plzni (prednosta: doc. ~. T. ~inka) a Ustredni RTG oddeleni  
(prednosta: doc. dr. Z. Chudacek).

SPINKA, Jcsef; VOJACEK, Vladimir; KARLICEK, Vilem

Postoperative staphylococcal pseudomembranous jejunitis simulating high ileus. Plzen. lek. sborn. 24:115-119 '64

I. Chirurgicka klinika lekarske fakulty University Karlovy v Plzni (prednosta: doc. dr. J. Spinka).

"APPROVED FOR RELEASE: 03/14/2001

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VOJACER, V.

- 27 -

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860410016-4"

VOJACEK, V.J., Prof.

Military otorhinolaryngology. Voj. zdrav. knihovna no.2873-338 1956.

(OTORHINO~~LARYNGO~~LOGICAL DISEASES,

in armed forces personnel, review (Cz))

(ARMED FORCES PERSONNEL, dis.

otorhinolaryngol. dis., review (Cz))

VOJACKOVA, H.

The principles of Dr. Mensendieck in physical exercise. Cesk.gyn.  
26[40] no.1/2:26 F '61.

(PHYSICAL EDUCATION AND TRAINING)

VOJAK, Josef

Extraordinary measures in the building industry to increase  
the material interest of workers. Prace mzda 12 no.2:  
52-57 F'64.

1. Ustredni rada odboru.

VOJAK, Josef

Results of the control of new wage systems in construction  
industry. Prace mzda 10 no.1:4-8 Ja '62.

VCJCAK, J.

Principles for planning the area automatization of the telephone network  
in Slovakia. (Strojnoelektrotechnicky Casopis, Vol. 8, No. 2, 1957,  
Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

L 32227-66 IJP(c)

ACC NR: AP6020840

SOURCE CODE: YU/0006/65/000/10-/0243/0248

AUTHOR: Vojchevski, Vasil (Graduate engineer)

25

B

ORG: V.G.I., Belgrade

16

TITLE: Combined method for the equalization of trigonometric networks

SOURCE: Geodetski list, no. 10-12, 1965, 243-248

TOPIC TAGS: least square method, trigonometry, measurement, approximation

ABSTRACT: Usually trigonometric networks are equalized by means of group equalization based on indirect measurements. The procedure is rigorous throughout the equalization process but it requires a substantial amount of time and effort. In practice, one does not need always a maximum degree of accuracy, and the author presents here a simpler method representing a combination of relative and indirect measurements. Although based on the least square method, it represents a satisfactory approximation to the group equalization method. The present article outlines the procedures and gives the theoretical justification. Examples will be published in later issues of the journal. Orig. art. has: 4 figures and 16 formulas. [JPRS]

SUB CODE: 12 / SUBM DATE: none

15  
Card 1/1

VOJCIC, Radovan, inz., puk. (Beograd)

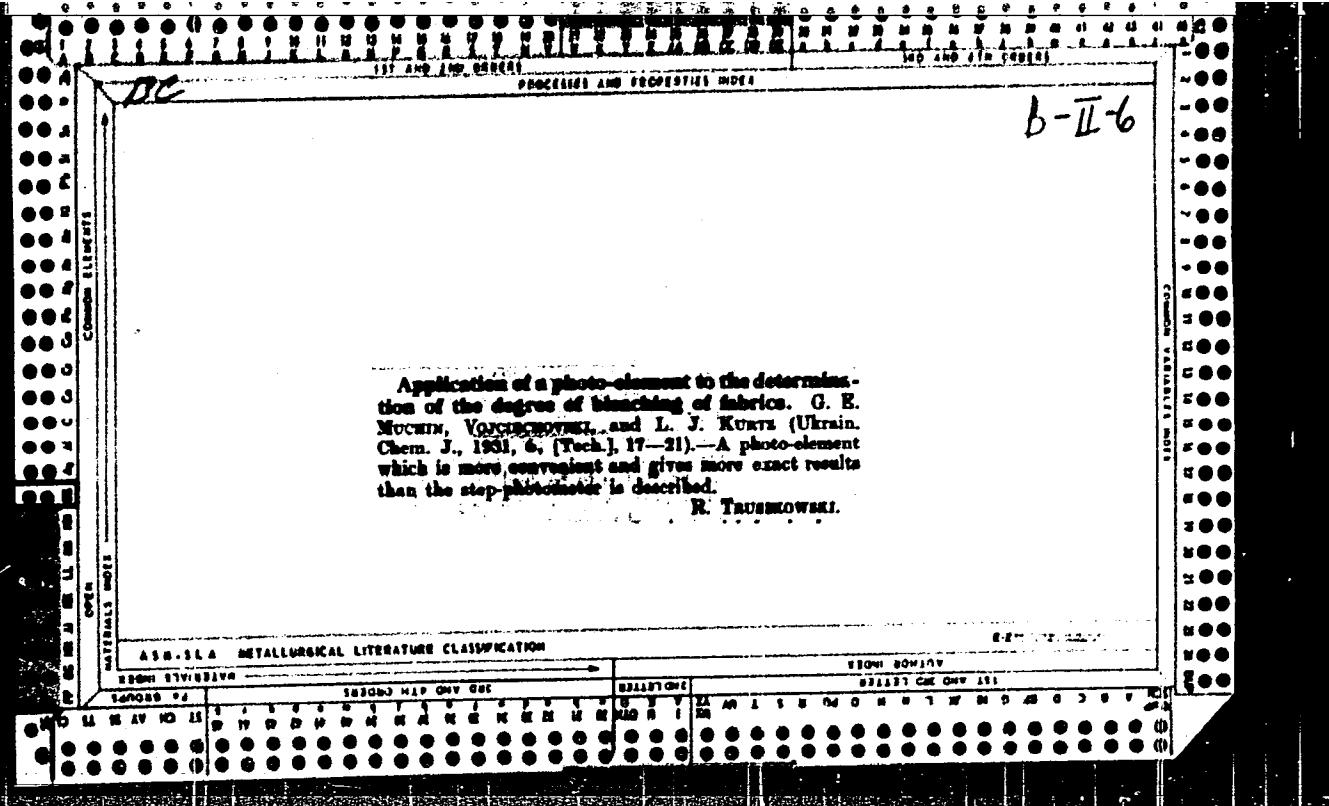
Determining the Laplace points. (Conclusion) Geod list 16  
no.4/6:167-174 Ap-Je '62.

1. Geografski institut Jugoslovenske narodne armije.

VOJCIC, Radovan, inz , puk.

Determination of the Laplace points. (To be contd.) Geod list 16  
1/3:38-49 '62.

1. Geografski institut Jugoslovenske narodne armije.



GOMORI, Pal; NAGY, Zoltan; JAKOB, Imre; VOJDA, Vera

On some problems related to the investigation of renal circulation.  
Biol orv kozl MTA 11 no.4:383-396 '60. (EEAI 10:5)

1. Budapesti Orvostudomanyi Egyetem II. sz. Belklinikaja.  
(KIDNEYS)

VOJN, Andrej, Inz.

Defects in steel casts. Livar vest li no.4/3.114-121 '64.

I. "Litostroj" Factory, Libeň, Praha.

CZECHOSLOVAKIA

VOJENCIAK, J., MVDr; KEVEK, M, MVDr

Kosice (for both)

Brno, Veterinarstvi, No 11, November 1966, pp 524-525

"Collection of blood from rabbits."

A-1

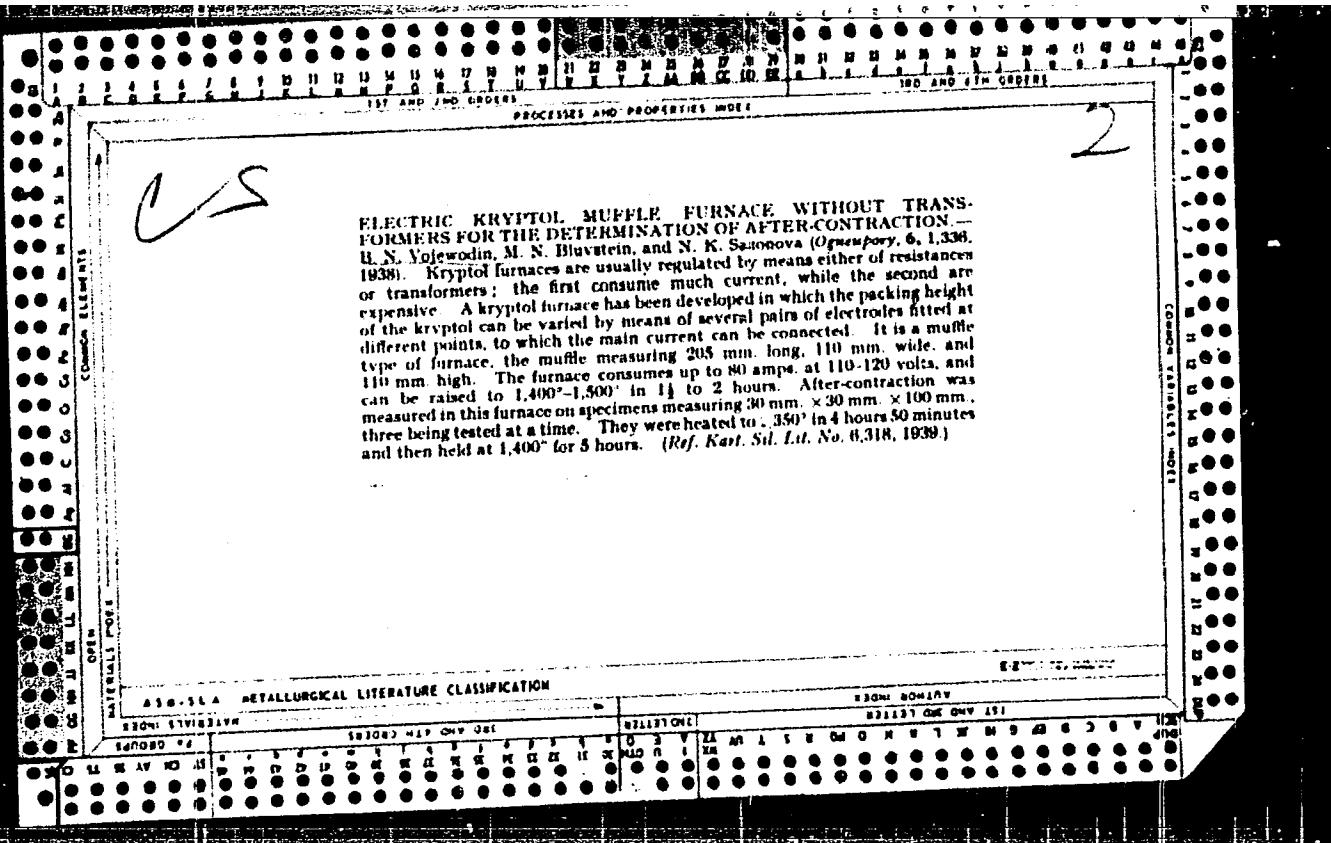
BC

Concentration of hydrogen atoms in a low-pressure hydrogen flame. V. V. Vojnyodolski (Compt. rend. Acad. Sci. U.R.S.S., 1944, 44, 280-284).—All available experimental data for the inflammation limits of H<sub>2</sub>-O<sub>2</sub> mixtures at low pressures agree with the deduction (from Lewis and Ribe's mechanism) that the min. temp. of a low-pressure flame uniquely determines the corresponding pressure for a given mixture composition. The "activation energy" of  $A_1$ , i.e., the rate constants for OH + H<sub>2</sub> → H<sub>2</sub>O + H and H + O<sub>2</sub> + M → HO<sub>2</sub> + M, respectively, which determine the variation of the lower limit with temp., is 21,000 g.-cal. If vibrational degrees of freedom are taken into account in the temp.-dependence of the life of HO<sub>2</sub>, and the effect of chain rupture at the wall is considered, the ratio [H]/[OH] = 8 is obtained for a 2H<sub>2</sub> + O<sub>2</sub> mixture at 1000° K. Kondratenko's val. for  $A_1 = 7 \times 10^{-18} \sqrt{T} \times e^{-10,000/T}$  is used. If the above factors are not taken into account the ratio [H]/[OH] = 180 is obtained.

## ATA-SLA METALLURGICAL LITERATURE CLASSIFICATION

*F. M.*

Concentration of hydrogen atoms in a low-pressure hydrogen flame. V. V. Vojcyski (*Compt. rend. Acad. Sci. U.R.S.S.*, 1944, 44, 260-284).—All available experimental data for the inflammation limits of H<sub>2</sub>-O<sub>2</sub> mixtures at low pressures agree with the deduction (from Lewis and Elbe's mechanism) that the min. temp. of a low-pressure flame uniquely determines the corresponding pressure for a given mixture composition. The "activation energy" of  $k_1/k_p$ , the rate const. for OH + H = H<sub>2</sub>O + H and H + O<sub>2</sub> + M → HO<sub>2</sub> + M, respectively, which determines the variation of the lower limit with temp., is 21,000 g.-cal. If vibrational degrees of freedom are taken into account in the temp.-dependence of the life of HO<sub>2</sub>, and the effect of chain rupture at the wall is considered, the ratio [H]/[OH] = 8 is obtained for a 2H<sub>2</sub> + O<sub>2</sub> mixture at 1000° K. Kondrateev's val. for  $k_1 = 7 \times 10^{-18} \sqrt{T} \times e^{-10,000/T}$  is used. If the above factors are not taken into account the ratio [H]/[OH] ≈ 150 is obtained. L. J. J.



Vojik, J.

SALEK, J.; VOJIK, J.

Cecal actinomycosis; further investigations on intestinal actinomy-

cosis. Gastroenterologia bohema 4 no.5-6:325-330 Dec 50. (CIML 20:6)

1. Of the Second Surgical Clinic of Charles University in Prague  
(Head--Prof.Jiri Divis,M.D.) and of the Second Pathologico-Anato-  
mical Institute of Charles University in Prague (Head--Prof.Vaclav  
Jedlicka,M.D.).

VOJINOVIC, J.

New revised Institute Cargo Clauses. Medun transp 9 no.12:  
831-832 D '63

JEREMIC, M.; VOJINOVIC, Lj.; SPASOJEVIC, M.

Hydrophysical properties and their relation in the profile of  
smonitza and parapodzols of Serbia. Zemljiste biljka 12 no.1/3:  
157-166 Ja-D '63.

1. Institute of Soil Science, Belgrade-Topcider.

Von Novak, Mihailo, dr. int.

Prof. Geza Bata; obituary. Gradevinač. no. 7:259. Je '64

VOJIR, R.; KUNCOVA, S.

Unusual mental disorders in inflammatory brain diseases. Cesk.  
psychiat. 60 no.4:246-249 Ag '64.

1. Neurologicke oddeleni nemocnice v Praze na Bulovce.

VOJNOVIC, Jovan, inz.

A survey of the results of temperature measurements in deep wells,  
and the temperature relations in the territories of Banat and  
Backa. Nafta Jug. 15 no.6:167-170 Je '64.

1. Naftagas Enterprise, Novi Sad.

VOJINOVIC, Jovan

Insurance against war and politic risks in the international maritime transportation of goods. Medun transp 7 no.11:1025-1027 N '61.

(Insurance, Marine)

SIMIN, Dina, inz.; VOJNCVIC, Jovan, inz.

Geologic and geophysical interpretation of the terrain in  
the region of oil and gas deposits in southwestern Banat.  
Nafta Jug 13 no.9/10:223-228 S-0 '62.

1. Naftagas, Novi Sad.

VOJINOVIC, Jovan

Insurance against the responsibility of the transporter in international road transportation for the damages of goods. Medun transp 7 no. 8:777-780 Ag '61.

VOJNOVIC, Jovan

Insurance of goods for international ocean traffic. Medun transp  
9 no.5:311-312 My '63.

VOJINOVIC, M. & PROTIĆ, R.

"Amplificateurs pour Impulsions"

SO: Recueil de Travaux, Vol 1, Belgrade, July 1952 (Pub of Vinca Inst.)

VOJINOVIC, M.

The Jaroslav Cerni Institute of Hydraulic Engineering in Belgrade, Avala Hydraulic Laboratory; design research in design of the Bar and Pasman harbors. p. 41.  
Survey of conferences and consultations in 1955. p. 49.  
(GODISNJAK, Yugoslavia, 1955 (published 1956.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860410016-4

VOJINOVIC, MIRKO M.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860410016-4"

VOJINOVIC, M.

Use of radioactive isotopes and detectors for control  
in industry. p. 234. Vol. 11, No. 2, 1956. TEHNIKA.  
Beograd, Yugoslavia.

SOURCE: East European Accessions List, (EEAL) Library  
of Congress, Vol. 5, No. 8, August, 1956.

VOJINOVIC, M.

Secondary emission tubes in coincidence circuits. In English.

P. 103 (Vinca, Yugoslavia,) Institut za Nuklearne narke. BULLETTIN. Vol. 7, 1957  
Beograd, Yugoslavia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,  
February 1958

VOJINOVIC, M.

"Scintillation counter."

p. 279 (Electrotehniski Vestnic. Electrotechnical Review) Vol. 25,  
no. 7/8 July/Aug. 1957. Ljubljana, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

VOJIMOVIC, M

Basis of the theory on sea waves. p. 159.

GEOLOSKI VJEŠNIK (Zavod za geoloska istraživanja Hrvatske i Hrvatsko geolosko drustvo) Zagreb, Yugoslavia. 1954 (published 1955).

Monthly list of East European Accessions (EIAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

VOJINOVIC, Mihailo.

Examination of a model conical dispersive floodgate. Vodoprivreda  
Jug 2 no.7/8:156-161 '59. (EEAI 10:1)

1. Hydrotehnicki institut "Ing. Jaroslav Cerni," Beograd.  
(Sluice gates) (Water pipes)

VOJINOVIC, Mihailo, ing.

Tailraces for the discharge of water from hydroelectric plants into  
the sea. Hidrograf god 1959:105-117 '60. (EEAI 10:6)

1. Institut za vodoprivredu "Jaroslev Cerni," Beograd.  
(Yugoslavia--Hydroelectric-power stations)

VOJIMOVIC, Mihailo

9th International Congress for Hydraulic Research. Tehnika Jug  
17 no.3:462-464 '62.

VOJINOVIC, Mihailo, dr. i.v.

Tenth International Congress for Hydraulic Research, Coimbra  
16 n. 4: 64-163 Ap '64

ACCESSION NR: AF4017961

I/0001/64/000/003/0507/0512

AUTHOR: Vojinovic, Mirko (Engineer); Carapic, Miodrag (Engineer)

TITLE: Safety systems for gas-cooled graphite-moderated reactors

SOURCE: Tehnika; no. 3, 1964, 507-512

TOPIC TAGS: safety amplifier channel, low-level flux, high-level flux, pressure variation, power plant safety system, log channel, counter channel, safety circuit, graphite-moderated reactor, gas-cooled reactor, reactor safety system

ABSTRACT: The article is a review of safety systems for gas-cooled graphite-moderated reactors. It describes the basic requirements for safety circuits and systems, the parameters and channels usually used in systems for gas-cooled graphite-moderated reactors, and the circuits of power plant safety systems. Reasons are given for adopting 2 out of 3 majority logic as the basis for safety systems. A section on parameters treats devices for measuring high- and low-level flux, temperature, velocity of pressure variation, and gas flow. Counter channels, low-level and high-level channels, and safety amplifier channels are reviewed. The final section describes circuits and gives block diagrams for all of these systems.

Orig. art. has: 6 figures.

Card 1/2

ACCESSION NR: AP4017961

ASSOCIATION: Institut za nuklearne nauke "Boris Kidric", Belgrade-Vinca  
(Institute for Nuclear Sciences)

SUBMITTED: 16Nov63

DATE ACQ: 12Mar 64

ENCL: 00

SUB CODE: NS

NO REF Sov: 000

OTHER: 007

Card 2/2

NIKOLIC, Paskal, dr; NESIC, Bogoslava, dr; VOJINOVIC, Radomir, dr

Considerations on the pulse frequency and rhythm in normal school  
children. Med. glas. 16 no.1:20-21 Ja '62.

1. Pedijatrijska klinika Medicinskog fakulteta u Beogradu (Upravnik:  
prof. dr B. Tasovac)

(PULSE in inf & child)

VOJINOVIC, S.

VOJINOVIC, S.; KURBEGOVIC, M. "Examinations for the rank of captain in the infantry and artillery." Vojni Glasnik, Beograd, Vol 7, No 12, Dec 1953, p. 27

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

VOJINOVIC, Spasoje

Obligation of stipulating, publishing, and equal application of  
tariffs. Zeleznice Jug 19 no.1:8-18 Ja '63.

VOJINOVIC, Z.; PETROVIC, V.

Effect of inoculation of alfaifa (*Medicago sativa* L.) and red  
clover (*Trifolium pratense* L.) in field tests. *Zemljiste biljka*  
12 no.1/3:295-300 Ja-D '63.

Effect of fertilizers on the microflora and microbiological  
processes in the soil. *Ibid.*:349-355

1. Institute of Soil Science, Belgrade-Tocider.

VOJINOVIC, Spasoje

Legal aspects of railroad service and functioning, and obligations of railroads and other branches of transportation.  
Zeleznice Jug 19 no.5:1-9 My '63.

MILOSEVIC, M.P.; TERZIC, M.; VOJNOVIC, V.

Contribution to the toxicology and pharmacology of Phosphamidon  
(2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethylphosphate).  
Arh. hig. rada 12 no.2:85-96 '61.

1. Farmakoloski institut Medicinskog fakulteta, Beograd.  
(PHOSPHATES toxicol) (CHOLINESTERASE antag)

VOJINOVIC, Z.

Vojinovic, Z.; Sevic, N. Some results of microbiological research on the arable stratum of soils in Serbia. p.249

SO: Monthly List of East European Accessions List (EEAL) LC, Vol 4, No. 11  
November 1955, Incl.

YUGOSLAVIA/Soil Science - Biology of Soils.

J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100045

Author : Vojinovic Z.

Inst :

Title : The Presence of Azotobacter in the Soils of Serbia

Orig Pub : Arhiv pejopr, nauke, 1956, 9, No 26, 97-112

Abstract : Specimens of various soils of Serbia were taken from the arable horizon (0-20 cm) and were analyzed immediately for the presence of azotobacter (A), according to Vinograd's method with a percentage determination of the germinating nodules on silica gel. Neutral soils or soils with an alkaline reaction are the richest in A. In soils, having a pH of less than 6.5, the quantity of azotobacter decreased sharply. Correlation between the soil-content of humus and available phosphoric acid and the A numbers was not found. The rhizosphere of various agricultural products manifested a different

Card 1/2

- 48 -

USSR/Soil Science - Biology of Soils.

J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100045

effect in the development, depending on the type of soil in which the plants grew. The application of manure or lime mixed with organic fertilizers favorably affected the development in podzol soils. Liming achieved no positive results.

Bibliography of 26 titles. -- Author's resume

Card 2/2

VOJINOVIC, Z.

Sensitivity of nodule bacteria to antibiotics. Zemljiste  
biljka 12 no.1/3:287-294 Ja-D '63.

Use of volatile material in respirometric and other analysis  
in soil microbiology. Zemljiste biljka 12 no.1/3:415-418 Ja-  
D '63.

1. Institute of Soil Science, Belgrade-Topsider.

VOJIR, P.

Today is not yesterday---

p. 484 (MECHANISACE ZEMEDELSTVI) Vol. 7, no. 21, Nov. 1957,  
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958